

6. (Amended) Process according to claim 1, in which the grain size of the hafnium powder ranges up to approximately 10 μm .

9. (Amended) Process according to claim 1, in which the homogeneous mixture is sintered in a graphite mould lined with a graphite sheet.

10. (Amended) Process according to claim 1, in which the mixture is sintered at a temperature of approximately 1800°C to 2100°C, at a pressure of around 70 to 110MPa for a period of approximately 15 to 90 minutes.

11. (Amended) Process according to claim 1, in which the mixture is sintered at a temperature of approximately 2000°C, at a pressure of around 92 MPa for a period of approximately 1 hour.

12. (Amended) Neutron absorbent material containing boron carbide and hafnium diboride obtained using a process according to claim 1.
